

REMARKS

Any fees that may be due in connection with the filing of this paper or with this application may be charged to Deposit Account No. 06-1050. If a Petition for Extension of time is needed, this paper is to be considered such Petition.

Claims 70-77 and 79-81 are pending herein. Claims 70 and 78 are cancelled herein without prejudice or disclaimer. Claims 71, 74 and 75 are amended herein to more distinctly claim the subject matter. No new matter is added.

DOUBLE PATENTING REJECTIONS

1. Statutory Double Patenting under 35 U.S.C. §101 – Claim 70

Claim 70 is rejected under 35 U.S.C. §101 for statutory double patenting over claim 3 of U.S. Patent No. 6,320,074 because the compound of claim 70 is disclosed as the second compound in claim 3 of U.S. Patent No. 6,320,074. This rejection respectfully is traversed.

Relevant law

Statutory double patenting under 35 U.S.C. §101 exists when two or more patents are granted that contain claims that encompass the same invention. In order for such a rejection to be proper, the claims of both applications must be of the same scope. Two claims are of the same scope if both encompass the same embodiments; they are of different scope if one claim encompasses at least one embodiment not encompassed by the other claim. A test for statutory double patenting under 35 U.S.C. §101 is whether it is possible to infringe the claims of one application without infringing the claims of the other application. If it is possible to infringe the claims of one application and not the other, the claims are of different scope.

Analysis

As between claim 3 in the '074 patent and claim 70 this test is not met. Claim 3 in the issued patent recites compounds other than 4-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethenyl]benzoic acid. It would be possible to infringe claim 3 of U.S. Patent No. 6,320,074, but not infringe instant claim 70 because claim 3 of U.S. Patent No. 6,320,074 recites species that are not recited in claim 70. Hence, claim 3 of the '074 patent includes embodiments not included in claim 70. Thus, claim 3 of U.S. Patent No. 6,320,074 is of a different scope from instant claim 70. Therefore, as between instant claim 70 and claim 3 of U.S. Patent No. 6,320,074, statutory double patenting does not exist. Notwithstanding this, claim 70 is cancelled herein.

2. Statutory Double Patenting under 35 U.S.C. §101 – Claim 78

Claim 78 is provisionally rejected under 35 U.S.C. §101 for statutory double patenting over claim 19 of copending U.S. application Serial No. 08/141,296 because instant claim 78 is alleged to be directed to the same subject matter as claim 19 of the '296 application. It is respectfully submitted that cancellation of claim 78 herein obviates the rejection.

3. Judicially Created Doctrine of Obviousness-Type Double Patenting – Claims 71-81

Claims 71-81 are rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-3 and 29-41 of U.S. Patent No. 6,320,074 (hereinafter the '074 patent). The Examiner alleges that, although the conflicting claims are not identical, they are not patently distinct, because “the instant application is fully disclosed in the patent” and “the generic claim 1, 29 reads on the genus of claim 71, 74 of the instant application” and “thus the patent discloses a larger genus and the applicants genus is smaller.” This rejection respectfully is traversed.

Relevant law

Obvious-type double patenting occurs when the difference between a first-patented invention and a later claimed invention involves only an unpatentable difference, such that grant of the second patent would extend the right of exclusivity conferred by the first patent. *See, e.g., General Foods Corp. v. Studiengesellschaft Kohle mbH*, 23 USPQ2d 1839, 1845 (Fed. Cir. 1992). Analysis for obvious-type double patenting involves a comparison of the claims at issue “with what invention is *claimed* in the earlier patent, paying careful attention to the rules of claim interpretation to determine what invention a claim *defines* and not looking to the claim for anything that happens to be mentioned in it as though it were a prior art reference.” *Id.* (emphasis in original); *see, also, Ortho Pharm. Corp. v. Smith*, 22 USPQ2d 1119, 1125 (Fed. Cir. 1992) (“It is the claims, not the specification that defines an invention [citation] . . . [a]nd it is the claims that are compared when assessing double patenting.”). Thus, an obviousness-type double patenting rejection is based on the claims and not on the disclosure of a patent.

The comparison between claims in an obviousness-type double patenting inquiry requires the use of a fundamental rule of claim construction, that the invention is defined by the claim taken as a whole – every claim limitation (or each step) being material to the description of the invention. *Ortho Pharm. Corp.*, 22 USPQ2d at 1125. Thus, it is inappropriate to base an obviousness-type double patenting rejection on the disclosure of a patent, even when such disclosure is found in the claims. Only the claims are considered in determining whether

obviousness-type double patenting exists and they are not used as disclosure but are interpreted based on the rules of claim construction.

Obviousness-type double-patenting has not been found when claims at issue do not embrace the prior patent compounds and/or the claims in the prior patent do not suggest any modification that would have produced the claimed compounds in the patent or application at issue. *See, e.g., Id.* In *Ortho*, obvious-type double patenting was not found in an instance in which the claims in the patent at suit were directed to compounds that did not encompass, structurally, the compounds claimed in the prior patents, and the claims in the prior patents did not suggest a modification (based upon the principles of claims interpretation) of their compounds to produce compounds claimed in the patent at suit.

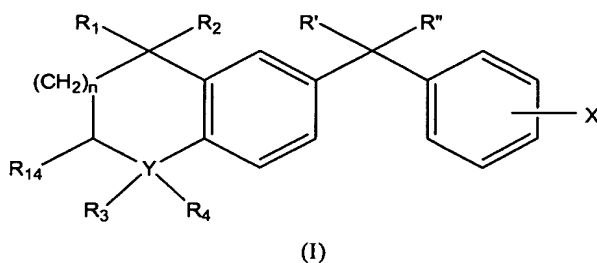
Summary

In the instant application, none of the amended claims encompasses any claim in the '074 patent and the claims in the '074 patent do not suggest modifications that would have resulted in the instant claims. The instant claims include different sets of substituents that are not claimed in the '074 patent. Accordingly, as demonstrated below by a comparison among the claims and claimed subject matter, obviousness-type double patenting does not exist as between any of the instant claims and any claim in the '074 patent. To compare the claims we describe them below, and then compare the coverage and show that none of the claims overlap.

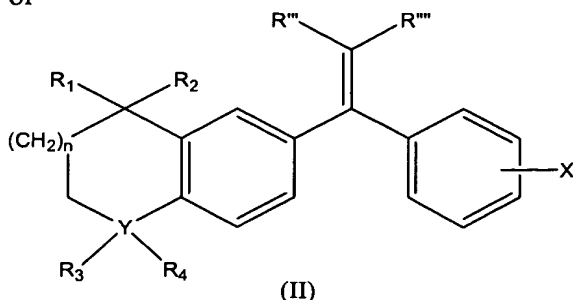
The Rejected Claims in This Application

Independent claim 71 recites:

71. A compound represented by formula I or II:



OR



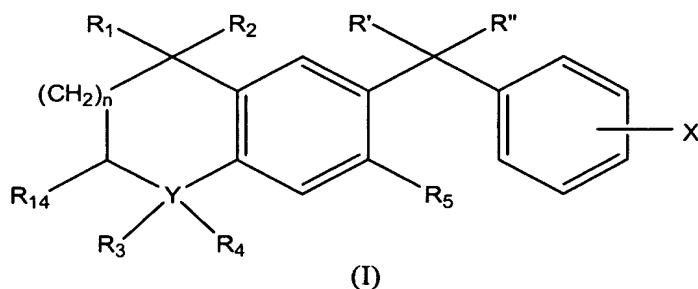
wherein:

R₁ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;
R₂ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;
Y is C, N, S, or O, wherein:
if Y is C, then R₃ is hydrogen or a lower alkyl comprising 1-4 carbon atoms,
and R₄ is hydrogen or a lower alkyl comprising 1-4 carbon atoms,
if Y is N, then R₃ is hydrogen or a lower alkyl comprising 1-4 carbon atoms, and
R₄ does not exist,
if Y is S, then R₃ does not exist, and R₄ does not exist,
if Y is O, then R₃ does not exist, and R₄ does not exist;
R₁₄ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;
R' is hydrogen or a lower alkyl comprising 1-4 carbon atoms and R'' is a lower alkyl
comprising 1-4 carbon atoms;
R''' is hydrogen or a lower alkyl comprising 1-4 carbon atoms, and R'''' is a lower
alkyl comprising 1-4 carbon atoms;
X is COOH and originates from C3, C4, or C5 of the ring; and
n = 0-1;
or a pharmaceutically acceptable ester, amide or salt thereof.

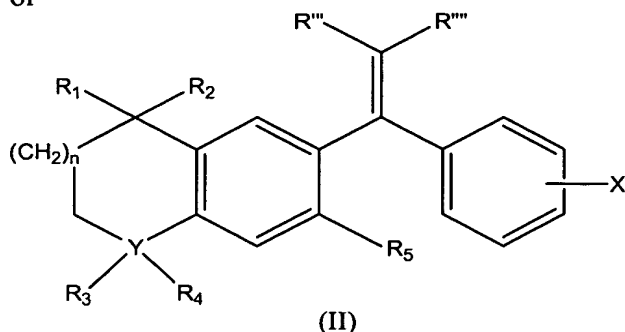
Claims 72 and 73 depend from claim 71 and are directed to various embodiments thereof. Claim 79 is directed to a pharmaceutical composition that includes a compound of claim 71.

Independent Claim 74 recites:

74. A compound represented by formula I or II:



or



wherein:

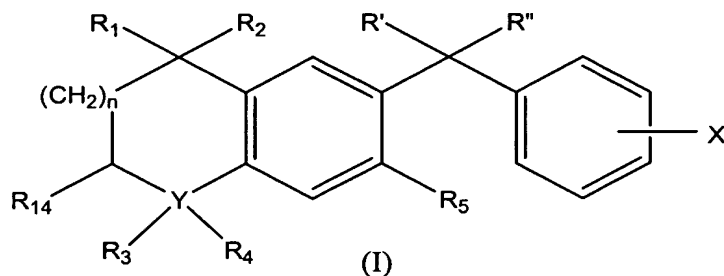
R₁ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;
R₂ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;
Y is C, N, S, or O, wherein:
if Y is C, then R₃ is hydrogen or a lower alkyl comprising 1-4 carbon atoms, and
R₄ is hydrogen or a lower alkyl comprising 1-4 carbon atoms,

if Y is N, then R₃ is hydrogen or a lower alkyl comprising 1-4 carbon atoms, and R₄ does not exist,
if Y is S, then R₃ does not exist, and R₄ does not exist,
if Y is O, then R₃ does not exist, and R₄ does not exist;
R₅ is OR₇, wherein R₇ is hydrogen or a lower alkyl comprising 1-6 carbon atoms;
R₁₄ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;
R' is hydrogen and R'' is hydrogen, or R' and R'' together form an oxo (keto) or a methano;
R''' is hydrogen;
R'''' is hydrogen;
X is COOH and originates from C3, C4, or C5 of the ring; and
n = 0-1; or
a pharmaceutically acceptable ester, amide or salt thereof.

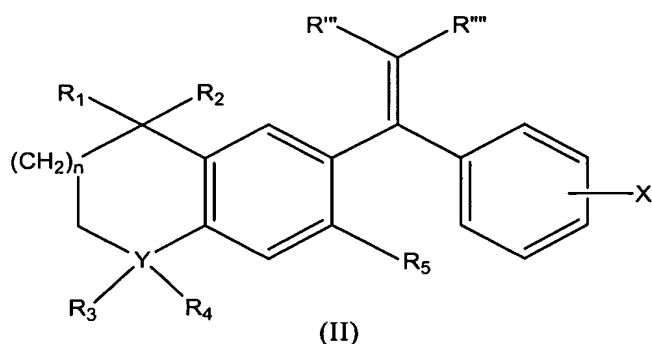
Claim 80 is directed to a pharmaceutical composition that includes a compound of claim 74.

Independent claim 75 recites:

75. A compound represented by formula I or II:



or



wherein:

R₁ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;
R₂ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;
Y is C, N, S, or O, wherein:
if Y is C, then R₃ is hydrogen or a lower alkyl comprising 1-4 carbon atoms, and R₄ is hydrogen or a lower alkyl comprising 1-4 carbon atoms,
if Y is N, then R₃ is hydrogen or a lower alkyl comprising 1-4 carbon atoms, and R₄ does not exist,
if Y is S, then R₃ does not exist, and R₄ does not exist,
if Y is O, then R₃ does not exist, and R₄ does not exist;
R₅ is OR₇, wherein R₇ is hydrogen or a lower alkyl comprising 1-6 carbon atoms;
R₁₄ is hydrogen or a lower alkyl comprising 1-4 carbon atoms;

R' is hydrogen or a lower alkyl comprising 1-4 carbon atoms and R'' is a lower alkyl comprising 1-4 carbon atoms;

R''' is hydrogen or a lower alkyl comprising 1-4 carbon atoms, and R'''' is a lower alkyl comprising 1-4 carbon atoms;

X is COOH and originates from C3, C4, or C5 of the ring; and

n = 0-1; or

a pharmaceutically acceptable ester, amide or salt thereof.

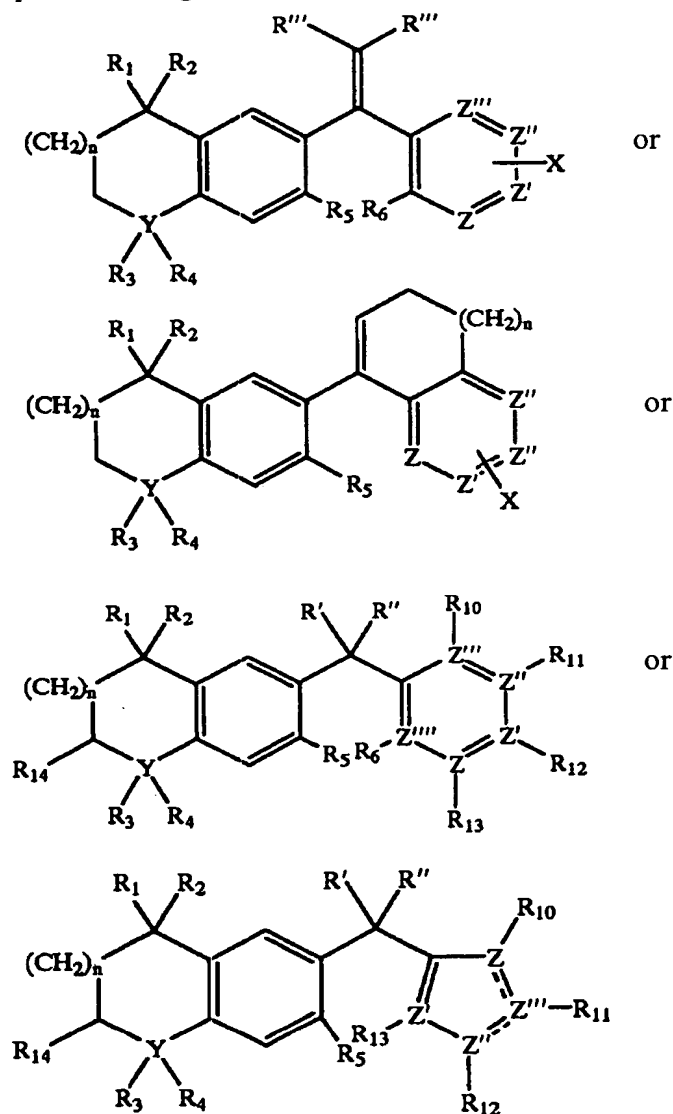
Claims 76 and 77 depend from claim 75 and are directed to various embodiments thereof. Claim

81 is directed to a pharmaceutical composition that includes a compound of claim 75.

Independent Claims 1, 3 and 29 of the '074 Patent

Claim 1 of the '074 patent recites:

1. A compound having the formula:



wherein:

R₁ and R₂, each independently, represent hydrogen or lower alkyl or acyl having 1-4 carbon atoms;

Y represents C, O, S, N, CHOH, CO, SO, SO₂ or a pharmaceutically acceptable salt;

R₃ represents hydrogen or lower alkyl having 1-4 carbon atoms where Y is C or N;

R₄ represents hydrogen or lower alkyl having 1-4 carbon atoms where Y is C, but R₄ does not exist if Y is N, and neither R₃ or R₄ exist if Y is S, O, CHOH, CO, SO, or SO₂;

R' and R'' represent hydrogen, lower alkyl or acyl having 1-4 carbon atoms, OH, alkoxy having 1-4 carbon atoms, thiol or thio ether, or amino, or

R' and R'' taken together form an oxo (keto), methano, thioketo, HO—N=, NC—N=, (R₇ R₈)N—N=, R₁₇ O—N=, R₁₇ N=, epoxy, cyclopropyl, or cycloalkyl group and wherein the epoxy, cyclopropyl, and cycloalkyl groups can be substituted with lower alkyl having 1-4 carbons or halogen;

R''' and R'''' represent hydrogen, halogen, lower alkyl or acyl having 1-4 carbon atoms, alkyl amino, or

R''' and R'''' taken together form a cycloalkyl group having 3-10 carbons, and wherein the cycloalkyl group can be substituted with lower alkyl having 1-4 carbons or halogen;

R₅ represents hydrogen, a lower alkyl having 1-4 carbons, halogen, nitro, OR₇, SR₇, NR₇R₈,

R₆, R₁₀, R₁₁, R₁₂, R₁₃ each independently represent hydrogen, a lower alkyl having 1-4 carbons, halogen, nitro, OR₇, SR₇, NR₇R₈, or (CF₂)_nCF₃, and exist only if the Z, Z', Z'', Z''', or Z'''' from which it originates is C, or each independently represent hydrogen or a lower alkyl having 1-4 carbons if the Z, Z', Z'', Z''', or Z'''' from which it originates is N, and where one of R₆, R₁₀, R₁₁, R₁₂ or R₁₃ is X;

R₇ represents hydrogen or a lower alkyl having 1-6 carbons;

R₈ represents hydrogen or a lower alkyl having 1-6 carbons;

R₉ represents a lower alkyl having 1-4 carbons, phenyl, aromatic alkyl, or q-carboxy-phenyl q-hydroxyphenyl, q-bromophenyl, q-chlorophenyl, q-fluorophenyl, or q-iodophenyl, where q=2-4;

R₁₄ represents hydrogen, a lower alkyl having 1-4 carbons, oxo, hydroxy, acyl having 1-4 carbons, halogen, thiol, or thioketone;

R₁₇ represents hydrogen, lower alkyl having 1-8 carbons, alkenyl (including halogen, acyl, OR₇ and SR₇ substituted alkenes) R₉, alkyl carboxylic acid (including halogen, acyl, OR₇ and SR₇ substituted alkyls), alkenyl carboxylic acid (including halogen, acyl, OR₇ and SR₇ substituted alkenes), alkyl amines (including halogen, acyl, OR₇ and SR₇ substituted alkyls), and alkenyl amines (including halogen, acyl, OR₇ and SR₇ substituted alkenes);

X is COOH, tetrazole, PO₃ H, SO₃H, CHO, CH₂OH, CONH₂, COSH, COOR₉, COSR₉, CONHR₉, or COOW where W is a pharmaceutically acceptable salt, and where X can originate from any C or N on the ring;

one of Z, Z', Z'', Z''' and Z''', each independently, represent O, N, or a pharmaceutically acceptable salt, and the rest are C, however, all Z's may represent C in the second structure but one of Z, Z', Z'', Z''' and Z'''' is not O or S if attached by a double bond to another such Z or if attached to another such Z which is O or S, and is not N if attached by a single bond to another such Z which is N and is not O or S in any of the six-membered rings containing them;

n=0-3; and

the dashed lines in the fourth structure shown depicts optional double bonds.

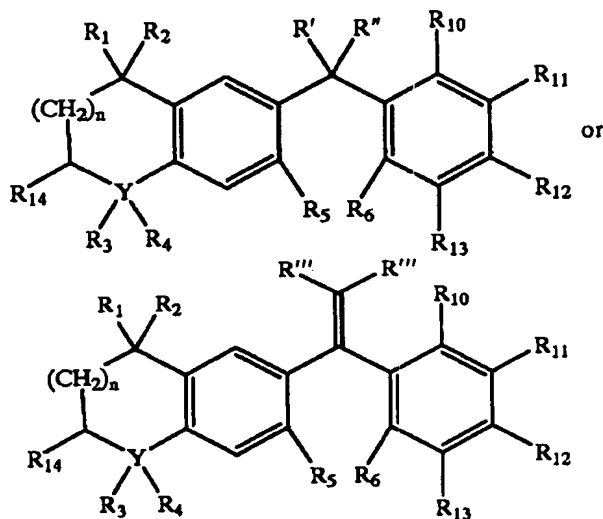
Claim 3 of the '074 patent¹ recites:

3. A compound selected from the group consisting of:

4-[3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl]carbonyl]benzoic acid,
4-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethenyl]benzoic acid,
4-[1(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)cyclopropyl]benzoic acid,
4-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethenyl]benzene-tetrazole,
2-[1-(5,5,8,8-tetramethyl-5,6,7,8-tetrahydro-2-naphthyl)ethenyl]pyridine-5- carboxylic acid,
2-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethyl]pyridine-5- carboxylic acid,
ethyl-2-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethenyl]pyridine-5-carboxylate,
5-[1-3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethenyl]pyridine-2-carboxylic acid,
2-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)cyclopropyl]pyridine-5-carboxylic acid,
methyl 2-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)cyclopropyl]-pyridine-5-carboxylate, and
4-[1-(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)ethenyl]-N-(4-hydroxyphenyl)benzamide.

Claim 29 of the '074 patent recites:

29. A compound of the formula:



wherein:

R₁ and R₂, independently, represent hydrogen or lower alkyl or acyl having 1-4 carbon atoms;

¹ We note that an error appears in claim 3 of the '074 patent as published. Claim 3 as issued recites eleven compounds by name. The third compound listed, 4-[1(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)cyclopropyl]benzoic acid, was deleted during prosecution and so its inclusion is an error. A Request for Certificate of Correction requesting the removal of the compound "4-[1(3,5,5,8,8-pentamethyl-5,6,7,8-tetrahydro-2-naphthyl)-cyclopropyl]benzoic acid" from issued claim 3 was filed March 16, 2006 to correct this error. Hence, for purposes of this discussion, the instant claims are compared to claim 3 as reciting ten compounds.

Y represents C, O, S, N, CHOH, CO, SO, SO₂ or a pharmaceutically acceptable salt;
R₃ represents hydrogen or lower alkyl having 1-4 carbon atoms where Y is C or N;
R₄ represents hydrogen or lower alkyl having 1-4 carbon atoms where Y is C, but R₄ does not exist if Y is N, and neither R₃ or R₄ exist if Y is S, O, CHOH, CO, SO, or SO₂;
R' and R'' represent hydrogen, lower alkyl or acyl having 1-4 carbon atoms, OH, alkoxy having 1-4 carbon atoms, thiol or thio ether, or amino, or
R' and R'' taken together form an oxo (keto), methano, thioketo, HO—N=, NC—N=, (R₇ R₈)N—N=, R₁₇ O—N=, R₁₇ N=, epoxy, cyclopropyl, or cycloalkyl group and wherein the epoxy, cyclopropyl, and cycloalkyl groups can be substituted with lower alkyl having 1-4 carbons or halogen;
R''' and R'''' represent hydrogen, halogen, lower alkyl or acyl having 1-4 carbon atoms, alkyl, amino, or
R''' and R'''' taken together form a cycloalkyl group having 3-10 carbons, and wherein the cycloalkyl group can be substituted with lower alkyl having 1-4 carbons or halogen;
R₅ represents halogen, nitro, SR₇, NR₇R₈, or (CF₂)_nCF₃;
R₆, R₁₀, R₁₁, R₁₂, R₁₃ each independently represent hydrogen, a lower alkyl having 1-4 carbons, halogen, nitro, OR₇, SR₇, NR₇ R₈, or (CF₂)_nCF₃, or X;
R₇ represents hydrogen or a lower alkyl having 1-6 carbons;
R₈ represents hydrogen or a lower alkyl having 1-6 carbons;
R₉ represents a lower alkyl having 1-4 carbons, phenyl, aromatic alkyl, or q-carboxyphenyl, q-hydroxyphenyl, q-bromophenyl, q-chlorophenyl, q-fluorophenyl, or q-iodophenyl, where q=2-4;
R₁₄ represents hydrogen, a lower alkyl having 1-4 carbons, oxo, hydroxy, acyl having 1-4 carbons, halogen, thiol, or thioketone;
R₁₇ represents hydrogen, lower alkyl having 1-8 carbons, alkenyl (including halogen, acyl, OR₇ and SR₇ substituted alkenes) R₉, alkyl carboxylic acid (including halogen, acyl, OR₇ and SR₇ substituted alkyls), alkenyl carboxylic acid (including halogen, acyl, OR₇ and SR₇ substituted alkenes), alkyl amines (including halogen, acyl, OR₇ and SR₇ substituted alkyls), and alkenyl amines (including halogen, acyl, OR₇ and SR₇ substituted alkenes);
X is COOH, tetrazole, PO₃H, SO₃H, CHO, CH₂OH, CONH₂, COSH, COOR₉, COSR₉, CONHR₉, or COOW where W is a pharmaceutically acceptable salt, and where X can originate from any C on the ring, provided however, that X cannot be COOH, CHO, CH₂OH, CONH₂, COOR₉, or COOW where W is a pharmaceutically acceptable salt when X originates from a C in the 2 or 6 position on the ring; and
n=0-3.

ANALYSIS

I. Comparison of instant claims 71, 74 and 75 with claim 1 of the '074 patent

Claim 1 of the '074 patent includes several formulae; each is compared in turn with the formulae of claims 71 and 74. Claim 29 and Claim 3 also are discussed separately below.

1. Claim 71

Claim 71 recites formulae that include a hydrogen at position 3 (corresponding to the R₅ substituent in the compounds of '074) and a carbocyclic ring as a substituent off of the bridging carbon atom. None of claims of the '074 patent recites compounds that include hydrogen at position 3 and a carbocyclic ring as a substituent off of the bridging carbon atom.

a. First and Third Formula of Claim 1

Claim 1 of the '074 patent recites compounds selected from among four formulae. The first and third formulae of claim 1 of the '074 patent include a bridging carbon substituted with a heterocyclic ring that includes O or N for one of Z, Z', Z'', Z''' and Z''''.

Compounds of claim 71 do not include off of the bridging carbon a heterocyclic substituent that includes O or N. Thus, the instantly claimed compounds of claim 71 do not embrace compounds of the first and third formula of claim 1. Further, the instantly claimed formulae of claim 71 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of its first and third formula of claim 1 to produce compounds as instantly claimed because none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring.

For example, claim 3 of the '074 patent recites compounds having a methyl substituent at position 3 and a carbocyclic ring off of the bridging carbon (see the first through fourth and last compound). None of the compounds of claim 3 suggests compounds having a hydrogen substituent at position 3 and a carbocyclic ring substituent off of the bridging carbon.

Therefore, as between compounds of claim 71 and compounds of the first and third formula of claim 1 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

b. Second Formula of Claim 1 of the '074 Patent

The compounds of the second formula of claim 1 in the '074 patent include a bicyclic substituent on the 2 position of the bicyclic core structure. None of the formulae of claim 71 includes a bicyclic substituent at position 2 as required by the second formula of claim 1 of the '074 patent. Thus, the instantly claimed formulae of claim 71 do not embrace the second formula of claim 1.

Further, the instantly claimed formulae of claim 71 are not obvious variants of the claims in the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of its second formula of claim 1 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claim 71 and compounds of the second formula of claim 1 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

c. Fourth Formula of Claim 1 of the '074 Patent

The compounds of the fourth formula of claim 1 in the '074 patent include a five-membered ring off of the bridging carbon. None of the formulae of claim 71 includes a five-membered ring off of the bridging carbon. Thus, the instantly claimed formulae of claim 71 do not embrace compounds of the fourth formula of claim 1.

Further, the instantly claimed formulae of claim 71 are not obvious variants of the claims of the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of its fourth formula of claim 1 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claim 71 and compounds of the fourth formula of claim 1 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

2. Claims 74 and 75

Claims 74 and 75 recite formulae that include a carbocyclic ring as a substituent off of the bridging carbon atom and are substituted at position 3 (corresponding to the R₅ substituent in the compounds of '074) with the substituent OR⁷ where R⁷ is hydrogen or a lower alkyl including 1-6 carbon atoms. None of claims of the '074 patent recites compounds that include an -OH substituent or -O(alkyl including 1-6 carbon atoms) substituent at position 3 and a carbocyclic ring as a substituent off of the bridging carbon atom.

a. First and Third Formula of Claim 1

The first and third formulae of claim 1 of the '074 patent include a bridging carbon substituted with a heterocyclic ring that includes O or N for one of Z, Z', Z'', Z''' and Z'''. Compounds of claims 74 and 75 do not include a heterocyclic substituent that includes O or N off of the bridging carbon. Thus, the instantly claimed compounds of claims 74 and 75 do not embrace compounds of the first and third formula of claim 1. Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of its first and third formula of claim 1 to produce compounds as instantly claimed because none of the claimed compounds of the '074 patent includes a carbocyclic ring as a substituent off of the bridging carbon and a -OH substituent or -O(alkyl including 1-6 carbon atoms) substituent at position 3.

For example, claim 3 of the '074 patent recites compounds having a methyl substituent at position 3 and a carbocyclic ring off of the bridging carbon (*e.g.*, see the first, second, fourth

and last compound). None of the compounds of claim 3 suggests compounds having an –OH substituent or an –O(alkyl including 1-6 carbon atoms) substituent at position 3 and a carbocyclic ring substituent off of the bridging carbon. Also, compounds of claim 29 include a substituent at position 3 that is a halogen, nitro, SR₇, NR₇R₈, or (CF₂)_nCF₃. Thus, none of the compounds of claim 29 suggests compounds having an –OH substituent or an –O(alkyl including 1-6 carbon atoms) substituent at position 3 and a carbocyclic ring substituent off of the bridging carbon.

Therefore, as between compounds of claims 74 and 75 and compounds of the first and third formula of claim 1 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

b. Second Formula of Claim 1 of the '074 Patent

The compounds of the second formula of claim 1 in the '074 patent include a bicyclic substituent on the 2 position of the bicyclic core structure. None of the formulae of claims 74 and 75 includes a bicyclic substituent at position 2 as required by the second formula of claim 1. Thus, the instantly claimed formulae of claims 74 and 75 do not embrace the second formula of claim 1.

Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the claims in the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of its second formula of claim 1 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes an –OH substituent or –O(alkyl including 1-6 carbon atoms) substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claims 74 and 75 and compounds of the second formula of claim 1 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

c. Fourth Formula of Claim 1 of the '074 Patent

The compounds of the fourth formula of claim 1 in the '074 patent include a five-membered ring off of the bridging carbon. None of the formulae of claims 74 and 75 includes a five-membered ring off of the bridging carbon. Thus, the instantly claimed formulae of claims 74 and 75 do not embrace compounds of the fourth formula of claim 1.

Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the claims of the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of its fourth formula of claim 1 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes an –OH

substituent or -O(alkyl including 1-6 carbon atoms) substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claims 74 and 75 and compounds of the fourth formula of claim 1 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

II. Comparison of instant claims 71, 74 and 75 with claim 3 of the '074 patent

1. Claim 71

a. Compounds 1, 2, 4 and 11 of Claim 3 of the '074 patent

The first, second, fourth and eleventh listed compounds of claim 3 of the '074 patent include a methyl substituent at position 3 and a carbocyclic ring off of the bridging carbon. The claimed compounds of instant claim 71 include a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. None of the formulae of claim 71 includes a methyl substituent at position 3 and a carbocyclic ring off of the bridging carbon. Thus, the instantly claimed compounds of claim 71 do not embrace compounds of the fourth formula of claim 1.

Further, the instantly claimed formulae of claim 71 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of compounds 1, 2, 4 and 11 of claim 3 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claim 71 and compounds 1-4 and 11 of claim 3 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

b. Compounds 5 and 6 of Claim 3 of the '074 patent

Compounds 5 and 6 of claim 3 of the '074 patent include hydrogen at position 3 and a heterocyclic ring including nitrogen off of the bridging carbon. The claimed compounds of instant claim 71 include a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. None of the formulae of claim 71 includes a heterocyclic ring off of the bridging carbon. Thus, the instantly claimed compounds of claim 71 do not embrace compounds 5 and 6 of claim 3 of the '074 patent.

Further, the instantly claimed formulae of claim 71 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of compounds 5 and 6 of claim 3 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a

carbocyclic ring. Therefore, as between compounds of claim 71 and compounds 5 and 6 of claim 3 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

c. Compounds 7 and 8 of Claim 3 of the '074 patent

Compounds 7 and 8 of claim 3 of the '074 patent include a methyl substituent at position 3 and a heterocyclic ring including nitrogen off of the bridging carbon. The claimed compounds of instant claim 71 include a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. None of the formulae of claim 71 includes a methyl substituent at position 3 and a heterocyclic ring off of the bridging carbon. Thus, the instantly claimed compounds of claim 71 do not embrace compounds 7 and 8 of claim 3 of the '074 patent.

Further, the instantly claimed formulae of claim 71 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of compounds 7 and 8 of claim 3 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claim 71 and compounds 7 and 8 of claim 3 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

d. Compounds 9 and 10 of Claim 3 of the '074 patent

Compounds 9 and 10 of claim 3 of the '074 patent include a methyl substituent at position 3 and i) a cyclopropyl substituent and ii) a heterocyclic ring including nitrogen off of the bridging carbon. The claimed compounds of instant claim 71 include a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. None of the formulae of claim 71 includes a methyl substituent at position 3 and i) a cyclopropyl substituent and ii) a heterocyclic ring including nitrogen off of the bridging carbon. Thus, the instantly claimed compounds of claim 71 do not embrace compounds 9 and 10 of claim 3 of the '074 patent.

Further, the instantly claimed formulae of claim 71 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of compounds 9 and 10 of claim 3 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claim 71 and compounds 9 and 10 of claim 3 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

2. Claims 74 and 75

a. Compounds 1, 2, 4 and 11 of Claim 3 of the '074 patent

Compounds 1, 2, 4 and 11 of claim 3 of the '074 patent include a methyl substituent at position 3 and a carbocyclic ring off of the bridging carbon. The compounds of instant claims 74 and 75 are substituted at position 3 with the substituent OR⁷ where R⁷ is hydrogen or a lower alkyl including 1-6 carbon atoms and include a carbocyclic ring as a substituent off of the bridging carbon atom. None of the formulae of claims 74 and 75 includes a methyl at position 3 and a carbocyclic ring off of the bridging carbon. Thus, the instantly claimed compounds of claims 74 and 75 do not embrace compounds of the fourth formula of claim 1.

Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of compounds 1, 2, 4 and 11 of claim 3 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes an -OH substituent or -O(alkyl including 1-6 carbon atoms) substituent at position 3 and a carbocyclic ring as a substituent off of the bridging carbon atom. Therefore, as between compounds of claims 74 and 75 and compounds 1, 2, 4 and 11 of claim 3 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

b. Compounds 5 and 6 of Claim 3 of the '074 patent

Compounds 5 and 6 of claim 3 of the '074 patent include hydrogen at position 3 and a heterocyclic ring including nitrogen off of the bridging carbon. The compounds of instant claims 74 and 75 include a carbocyclic ring as a substituent off of the bridging carbon and an -OH or an -O(alkyl including 1-6 carbon atoms) as a substituent at position 3. None of the formulae of claims 74 and 75 includes a hydrogen at position 3 and a heterocyclic ring off of the bridging carbon. Thus, the instantly claimed compounds of claims 74 and 75 do not embrace compounds 5 and 6 of claim 3 of the '074 patent.

Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of compounds 5 and 6 of claim 3 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes an -OH substituent or -O(alkyl including 1-6 carbon atoms) substituent at position 3 and a carbocyclic ring as a substituent off of the bridging carbon atom. Therefore, as between compounds of claims 74 and 75 and compounds 5 and 6 of claim 3 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

c. Compounds 7 and 8 of Claim 3 of the '074 patent

Compounds 7 and 8 of claim 3 of the '074 patent include a methyl substituent at position 3 and a heterocyclic ring including nitrogen off of the bridging carbon. The compounds of instant claims 74 and 75 include an -OH or an -O(alkyl including 1-6 carbon atoms) as a substituent at position 3 and include a carbocyclic ring off of the bridging carbon. None of the formulae of claims 74 and 75 includes a methyl substituent at position 3 and a heterocyclic ring off of the bridging carbon. Thus, the instantly claimed formulae of claims 74 and 75 do not embrace compounds 7 and 8 of claim 3 of the '074 patent.

Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of compounds 7 and 8 of claim 3 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes an -OH substituent or -O(alkyl including 1-6 carbon atoms) substituent at position 3 and a carbocyclic ring as a substituent off of the bridging carbon atom. Therefore, as between compounds of claims 74 and 75 and compounds 7 and 8 of claim 3 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

d. Compounds 9 and 10 of Claim 3 of the '074 patent

Compounds 9 and 10 of claim 3 of the '074 patent include a methyl substituent at position 3 and i) a cyclopropyl substituent and ii) a heterocyclic ring including nitrogen off of the bridging carbon. The compounds of instant claims 74 and 75 include as a substituent at position 3 an -OH or an -O(alkyl including 1-6 carbon atoms) and include a carbocyclic ring off of the bridging carbon. None of the formulae of claims 74 and 75 includes a methyl substituent at position 3 and i) a cyclopropyl substituent and ii) a heterocyclic ring including nitrogen off of the bridging carbon. Thus, the instantly claimed compounds of claims 74 and 75 do not embrace compounds 9 and 10 of claim 3 of the '074 patent.

Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of compounds 9 and 10 of claim 3 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes an -OH substituent or -O(alkyl including 1-6 carbon atoms) substituent at position 3 and a carbocyclic ring as a substituent off of the bridging carbon atom. Therefore, as between compounds of claims 74 and 75 and compounds 9 and 10 of claim 3 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

III. Comparison of instant claims 71, 74 and 75 with claim 29 of the '074 patent

1. Comparison of claim 71 with Claim 29 of the '074 patent

Compounds of claim 29 of the '074 patent include a substituent at position 3 selected from among halogen, nitro, SR₇, NR₇R₈, or (CF₂)_nCF₃ and a carbocyclic ring off of the bridging carbon. The claimed compounds of instant claim 71 include a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. None of the formulae of claim 71 includes a carbocyclic ring off of the bridging carbon and a substituent at position 3 that is halogen, nitro, SR₇, NR₇R₈, or (CF₂)_nCF₃. Thus, the instantly claimed compounds of claim 71 do not embrace compounds claim 29 of the '074 patent.

Further, the instantly claimed formulae of claim 71 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of claim 29 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claim 71 and compounds of claim 29 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

2. Comparison of claims 74 and 75 with Claim 29 of the '074 patent

Compounds of claim 29 of the '074 patent include a carbocyclic ring off of the bridging carbon and a substituent at position 3 that is a halogen, nitro, SR₇, NR₇R₈, or (CF₂)_nCF₃. The compounds of claims 74 and 75 are substituted at position 3 with the substituent OR⁷ where R⁷ is hydrogen or a lower alkyl including 1-6 carbon atoms and include a carbocyclic ring as a substituent off of the bridging carbon atom. None of the formulae of claims 74 and 75 includes a carbocyclic ring off of the bridging carbon and a substituent at position 3 that is halogen, nitro, SR₇, NR₇R₈, or (CF₂)_nCF₃. Thus, the instantly claimed compounds of claims 74 and 75 do not embrace compounds claim 29 of the '074 patent.

Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of claim 29 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Therefore, as between compounds of claims 74 and 75 and compounds of claim 29 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

IV. Comparison of instant claims 71, 74 and 75 with claims 32-37 of the '074 patent

Claim 32 of the '074 patent recites a method for modulating a process mediated by one or more Retinoid X Receptors, the method including causing the process to be conducted in the presence of at least one compound of four formulae. Claims 33-36 ultimately depend from claim 32 and are directed to various embodiments thereof. Claim 37 recites a method for modulating a process mediated by one or more Retinoid X Receptors that includes administering one or more compounds of claim 32. Instant claims 71, 74 and 75 are directed to compounds and do not recite methods. Thus, instant claims 71, 74 and 75 are of a different scope than claims 32-36 of the '074 patent and are patently distinct. Therefore, as between instant claims 71, 74 and 75 and claims 32-37 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

V. Comparison of instant claims 71, 74 and 75 with claims 38-41 of the '074 patent

Claim 38 recites a method for treating a mammalian subject requiring Retinoid X Receptor therapy and includes administering one or more compounds as set forth in claim 29. Claim 39 recites a method for increasing plasma concentrations of high density lipoprotein in a mammalian subject and includes administering one or more compounds as set forth in claim 29. Claim 40 recites a method for determining the presence of one or more Retinoid X Receptors that includes combining a compound of claim 29 with a sample containing one or more unknown receptors. Claim 41 recites a method of purifying Retinoid X Receptors that includes combining a compound as set forth in claim 29 with a sample containing one or more Retinoid X Receptors. Instant claims 71, 74 and 75 are directed to compounds and not to methods. Thus, instant claims 71, 74 and 75 are of a different scope than claims 38-41 of the '074 patent and are patently distinct.

Further, as discussed above, as between compounds of instant claims 71, 74 and 75 and compounds of claim 29 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist. The compounds recited in claims 38-41 of the '074 are those set forth in claim 29 of the '074 patent. Therefore, as between the instant claims 71, 74 and 75 and claims 38-41 of the '074 patent, obviousness-type double patenting does not exist.

VI. Conclusion

1. Claim 71

Claim 71 recites formulae that include a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Compounds of claim 71 do not include a heterocyclic substituent off of the bridging carbon that includes O or N. None of the

formulae of claim 71 includes a methyl substituent at position 3 and a carbocyclic ring off of the bridging carbon. None of the formulae of claim 71 includes a bicyclic substituent at position 2. None of the formulae of claim 71 includes a five-membered ring off of the bridging carbon. None of the formulae of claim 71 includes a cyclopropyl substituent and a heterocyclic ring including nitrogen off of the bridging carbon. None of the formulae of claim 71 includes a carbocyclic ring off of the bridging carbon and a substituent at position 3 that is halogen, nitro, SR_7 , NR_7R_8 , or $(\text{CF}_2)_n\text{CF}_3$. Further, the instantly claimed formulae of claim 71 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of claims 1-3 or 29-41 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes a hydrogen substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Thus, as between compounds of claim 71 and compounds of claims 1-3 and 29-41 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

2. Claims 74 and 75

Claims 74 and 75 recite formulae that include a carbocyclic ring as a substituent off of the bridging carbon atom and are substituted at position 3 with the substituent OR^7 where R^7 is hydrogen or a lower alkyl including 1-6 carbon atoms. Compounds of claims 74 and 75 do not include a heterocyclic substituent off of the bridging carbon that includes O or N. None of the formulae of claims 74 and 75 includes a hydrogen at position 3 and a heterocyclic ring off of the bridging carbon. None of the formulae of claims 74 and 75 includes a methyl substituent at position 3 and a heterocyclic ring off of the bridging carbon. None of the formulae of claims 74 and 75 includes a cyclopropyl substituent and a heterocyclic ring including nitrogen off of the bridging carbon. None of the formulae of claims 74 and 75 includes a carbocyclic ring off of the bridging carbon and a substituent at position 3 that is halogen, nitro, SR_7 , NR_7R_8 , or $(\text{CF}_2)_n\text{CF}_3$. Further, the instantly claimed formulae of claims 74 and 75 are not obvious variants of the formulae claimed in the '074 patent. None of the claims of the '074 patent suggests any modification of the compounds of claims 1-3 or 29-41 to produce compounds as instantly claimed because, as discussed above, none of the claimed compounds of the '074 patent includes an $-\text{OH}$ or an $-\text{O}(\text{alkyl including 1-6 carbon atoms})$ substituent at position 3 and a substituent off of the bridging carbon that is a carbocyclic ring. Thus, as between compounds of claims 74 and 75 and compounds of claims 1-3 and 29-41 of U.S. Patent No. 6,320,074, obviousness-type double patenting does not exist.

Therefore, as between claims 1-3 and 29-41 of U.S. Patent No. 6,320,074 and pending claims 71-81, obviousness-type double patenting does not exist.

REJECTION OF CLAIM 78 UNDER 35 U.S.C. §102(g) AND POSSIBLY 102(f)

Claim 78 is rejected under 35 U.S.C. §102(g) and possibly under 102(f) because the Examiner alleges that the subject matter of instant claim 78 is the same as the subject matter of claim 19 of copending commonly assigned U.S. Patent Appln. Serial No. 08/141,296. The Examiner states that the issue of priority under 35 U.S.C. 102(g) and possibly under 102(f) must be resolved.

It is respectfully submitted that cancellation of claim 78 herein obviates the rejection.

THE REJECTION OF CLAIMS 71-81 UNDER 35 U.S.C. §102(e)

Claims 71-81 are rejected under 35 U.S.C. §102(e) as anticipated by Dawson *et al.* (U.S. Patent No. 5,466,861) because Dawson *et al.* allegedly discloses the instantly claimed compounds where R' and R" form an alkyl ring and allegedly has priority to compounds where R' and R" form an alkyl ring. The Examiner alleges that Dawson *et al.* discloses compounds where R' and R" form an alkyl ring generically and in claims 9, 10 and 21.

This rejection is respectfully traversed.

THE CLAIMS

See related section above.

ANALYSIS

Claims 71 and 79

As amended herein, claim 71 recites that for compounds of formula I, R' is hydrogen or a lower alkyl comprising 1-4 carbon atoms and R" is a lower alkyl comprising 1-4 carbon atoms. Further, as amended herein, claim 71 recites that for compounds of formula II, R''' is hydrogen or a lower alkyl comprising 1-4 carbon atoms and R'''' is a lower alkyl comprising 1-4 carbon atoms. Claim 79 recites a pharmaceutical composition that includes a compound of claim 71. Dawson *et al.* was filed November 25, 1992. Basis for compounds as recited in claim 71 is found in the priority documents that pre-date Dawson *et al.* For example, see U.S. Patent Application Serial No. 07/944,783, filed September 11, 1992, page 11, lines 7-9 and original claim 5. Therefore, Dawson *et al.* is not prior art under 35 U.S.C. §102(e) to claims 71 and 79.

Claims 72, 73 and 76-78

In order to advance the application to allowance, claims 72, 73 and 76-78 are cancelled herein rendering the rejection as directed to claims 72, 73 and 76-78 moot.

Applicant : Marcus F. Boehm *et al.*
Serial No. : 08/141,496
Filed : October 22, 1993

Attorney's Docket No.: 18202-002009 / 1002H
Amendment & Response

Claims 74 and 80

Applicant respectfully submits that as directed to claims 74 and 80 the rejection is improper. Claim 74 recites that R' is hydrogen and R'' is hydrogen, or R' and R'' together form an oxo (keto) or a methano. Claim 80 recites a pharmaceutical composition that includes a compound of claim 74. Dawson *et al.* was filed November 25, 1992. Basis for compounds of claim 74 is found in the priority documents that pre-date Dawson *et al.* For example, see U.S. Pat. App. Ser. No. 07/872,707, filed April 22, 1992, page 9, lines 13-14 and original claim 3. Therefore, Dawson *et al.* is not prior art under 35 U.S.C. §102(e) to claims 74 and 80.

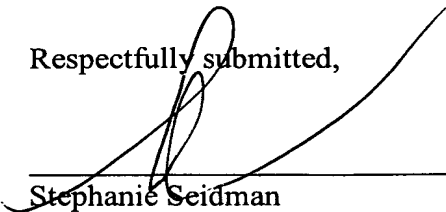
Claims 75 and 81

As amended herein, claim 75 recites that for compounds of formula I, R' is hydrogen or a lower alkyl comprising 1-4 carbon atoms and R'' is a lower alkyl comprising 1-4 carbon atoms. Further, as amended herein, claim 75 recites that for compounds of formula II, R''' is hydrogen or a lower alkyl comprising 1-4 carbon atoms and R'''' is a lower alkyl comprising 1-4 carbon atoms. Claim 81 recites a pharmaceutical composition that includes a compound of claim 75. Dawson *et al.* was filed November 25, 1992. Basis for compounds of claim 75 is found in the priority documents that pre-date Dawson *et al.* For example, see U.S. Pat. App. Serial No. 07/944,783, filed September 11, 1992, page 11, lines 7-9 and original claim 5). Therefore, Dawson *et al.* is not prior art under 35 U.S.C. §102(e) to claims 75 and 81.

* * *

In view of the above, examination of the application on the merits and allowance is respectfully requested.

Respectfully submitted,



Stephanie Seidman
Reg. No. 33,779

Attorney Docket No. 18202-002009 / 1002H
Address all correspondence to:
Stephanie Seidman
Fish & Richardson P.C.
12390 El Camino Real
San Diego, California 92130
Telephone: (858) 678-5070
Facsimile: (202) 626-7796
email: seidman@fr.com